## AN INEXPENSIVE CARRION BEETLE TRAP (COLEOPTERA: SILPHIDAE)<sup>1</sup>

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ABSTACT: An inexpensive carrion beetle trap is depicted (with diagrams and directions made available to the reader). Eight species of Silphidae and representatives from the families Dermestidae, Staphylinidae, Histeridae, Leiodidae, Scarabaeidae and Nitidulidae have been taken in this trap.

More than two decades of experience with sampling carrion beetles have given me ample opportunity to try out a variety of different traps. In my early studies I used a simple pitfall trap described by Walker (1957). Since then the pitfall method of trapping has been improved and described in detail by Newton and Peck (1975). For a period of time I used ground (surface) traps which were cleaner and easier to operate than pitfall traps (Shubeck, 1976). Although I still consider ground traps excellent in all ways, when being prepared for use they are cumbersome to transport if one must carry them any distance and if a large number of traps must be set up. One way to minimize the transport problem is to use a suspended-type trap which requires two No. 10 cans and a wire coat hanger for its construction (Shubeck, 1968). This trap has been improved by constructing a permanent inexpensive wood frame and rain cover to which a disposable No. 10 food can is attached. This trap is depicted in Fig. 1. It has been used by me in New Jersey, Maryland, and Missouri during the last few years and it has proved to be most satisfactory so long as it is not set up in the direct rays of the sun. Intense buildup of heat in the can may discourage beetles from entering the trap or may even drive some of the individuals out after they have entered.

Eight species of carrion beetles (Silphidae) have been taken in these traps. They are: Necrophila americana, Oiceoptoma noveboracense, O. inaequale, Necrodes surinamensis, Oiceoptoma orbicollis, N. tomentosus, N. pustulatus, and N. marginatus. Other families of "carrion beetles" that have been taken in these traps include Dermestidae, Staphylinidae, Histeridae, Leiodidae, Scarabaeidae, and Nitidulidae.

Detailed diagrams and directions for the construction of this inexpensive carrion beetle trap have been prepared and duplicated and are available to the reader upon request.

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Fig. 1. Inexpensive carrion beetle trap in use at Great Swamp National Wildlife Refuge, NJ. Photograph by Thomas P. Shubeck.

## LITERATURE CITED

Newton, A. and S.B. Peck. 1975. Baited pitfall traps for beetles. The Coleopterists Bull. 29(1): 45-56.

Shubeck P.P. 1968. Trapping Fabre's "sexton" beetles. The American Biology Teacher 30(6): 564-565.

Shubeck, P.P. 1976. An alternative to pitfall traps in carrion beetle studies (Coleoptera). Ent. News 87(5&6): 176-178.Walker, T.J. 1957. Ecological studies of the arthopods associated with certain decaying

Walker, T.J. 1957. Ecological studies of the arthopods associated with certain decaying materials in four habitats. Ecology 38: 262-276.